

- 11 -

### Claims

1. A self-locking shaft (1), comprising:
  - 5       a. a shaft portion (10);
  - b. a head portion (20) for mounting of the shaft (1) at a support (50); wherein
  - c. the head portion (20) comprises resilient clips (30), which latch with the  
10       support (50) during a rotational mounting motion of the shaft (1) with re-  
         spect to the support (50).
2. Self-locking shaft according to claim 1, wherein the clips (30) are provided as  
15       resilient straps which radially extend from a cup-shaped portion (22) to the  
      outside.
3. Self-locking shaft according to one of the claims 1 or 2, wherein the clips (30)  
      are connected to the cup-shaped portion (22) at one side of the clips (30) only  
      and wherein the connection line is axially oriented with respect to the shaft  
20       (1).
4. Self-locking shaft according to one of the claims 1 - 3, wherein the clips (30)  
      comprise a rectangular shape and an axially curved radial top surface.
- 25   5. Self-locking shaft according to one of the claims 1 - 4, wherein the shaft (1)  
      comprises a pin (40), which is connected to the head portion (20) in axial di-  
      rection and which secures the shaft (1) after the assembly from undesired ro-  
      tation.

- 12 -

6. Self-locking shaft according to one of the claims 1 - 5, wherein the shaft (1) comprises a handle area (23) at the head portion (20) for manual assembly of the shaft (1) in the support (50) without tools.
- 5 7. Self-locking shaft according to one of the claims 1 - 6, wherein the shaft (1) and all its components (10, 20, 30, 40) are integrally injection molded from a plastic material.
8. Support (50) for receiving a self-locking shaft (1), comprising:  
10
  - a. an essentially cylindrically socket (60), which is integrated within the support (50); and
  - b. at least one latching window (64) for receiving a clip (30) during the  
15 latching of the shaft (1) with the support (50) by a rotation; wherein
  - c. the latching window (64) is radially introduced into the cylindrical wall of the socket (60).
- 20 9. Support according to claim 8, further comprising a pin guidance (70), which is provided as a curved elongated hole.
10. Support according to one of the claims 8 - 9, wherein the socket (60) further comprises at least one axially curved recess (63) for receiving a clip (30) during the insertion of the shaft (1) into the support (50).  
25
11. Pedal system, particularly for automotive engineering, comprising a self-locking shaft (1) and/or a support (50) for a self-locking shaft according to one of the previous claims 1 to 10.

30

- 13 -

12. Parking brake lever system, particularly for automotive engineering, comprising a self-locking shaft (1) and/or a support (50) for a self-locking shaft according to one of the previous claims 1 to 10.
- 5 13. Method for the assembly of a shaft (1) within a support respectively a housing (50), comprising the following steps in the following sequence:
  1. Inserting the shaft (1) in axial direction (I) into a corresponding socket (60) within the support (50);
  - 10 2. Rotating the shaft (1) around its rotational axis, until clips (30), which extend radially from the shaft (1), snap into a latching window (64) within the socket (60).
- 15 14. Method according to claim 13, wherein the rotation of the shaft (1) is performed around an angle of less or equal 180°.
15. Method according to claim 13, wherein the rotation of the shaft (1) is performed around an angle of less or equal 90°.